

IN THE CLAIMS

Please amend claims 1 and 7-10 and add newly written claims 11-13 as follows.

Please substitute the following amended claim(s) for corresponding claim(s) previously presented. A copy of the amended claim(s) showing current revisions is attached.

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B6 1. (*Currently Amended*) An apparatus for focussing images from a plurality of object planes, said object planes at least partially separated along a first optical axis, onto a plurality of detectors, said detectors at least partially separated transversely with respect to a second optical axis, said apparatus comprising:

an optical system including a diffraction grating for acting upon incident light from said plurality of object planes to produce a plurality of diffraction orders of light; and

a plurality of ancillary optical modules , each module focussing one of said plurality of diffraction orders of light on a corresponding one of said plurality of transversely separated detectors.

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B7 7. (*Currently Amended*) An apparatus according to claim 1 whereby the diffraction grating is comprised of an amplitude-only diffraction grating, a phase only diffraction grating and a phase and amplitude diffraction grating and said grating is one of a reflective and a transmissive grating.

8. (*Currently Amended*) An apparatus according to claim 1 whereby the grating is one of a two-level (binary), a multi-level (digitised) and a continuous-level (analogue) structure.

9. (*Currently Amended*) The apparatus of claim 1 where each object plane contains an array of elements, capable of existing in at least two states and in which the detector is capable of distinguishing between said states.

10. (*Currently Amended*) An apparatus for reading data from a three dimensional

B ) optical storage medium wherein object planes are located within the medium comprising  
Cord an apparatus according to claim 9 wherein the detector is adapted to produce a signal dependent on the state of the elements.

-- 11. (*New*) An apparatus according to claim 1, wherein said first and second

B8 optical axes are coincident.

12. (*New*) An apparatus according to claim 1, wherein said diffraction grating includes grating lines.

13. (*New*) An apparatus according to claim 12, wherein the grating lines are not plane parallel.--